WHAT IS CLAIMED IS:

1. An image processing apparatus having read means for reading an original image as a color image, first output means for printing the image on a printing medium and outputting the image, second output means for transmitting the image to a communication partner terminal via a facsimile, and third output means for outputting the read image data to a connected information processing apparatus, characterized by comprising:

designation means for designating a read mode of said read means;

color transformation means for transforming a color space of the image data read by said read means into one of a plurality of color spaces;

compression means for compressing the image data in one of a plurality of compression formats; and

selection means for selecting a color space to be transformed by said color transformation means and a compression format of said compression means in accordance with the read mode designated by said designation means and one of said first to third means which is to output the read image.

2. The apparatus according to claim 1, characterized in that the read mode designated by said designation means includes a color read mode, a gray scale read mode, and a

monochrome read mode.

3. The apparatus according to claim 2, characterized in that when said designation means designates the color read mode, and said second output means is to output the read image, said selection means selects an Lab space as the color space to be transformed by said color transformation means, and JPEG as the compression format of said compression means.

4. The apparatus according to claim 2, characterized in that when said designation means designates the gray scale read mode, and said second output means is to output the read image, said selection means selects a YCbCr space as the color space to be transformed by said color transformation means, and JPEG as the compression format of said compression means.

5. The apparatus according to claim 2, characterized in that when said designation means designates the monochrome read mode, and said second output means is to output the read image, said selection means does not select a color space to be transformed by said color transformation means, and selects run length coding as the compression format of said compression means.

6. The apparatus according to claim 2, characterized by further comprising output copy setting means for setting the number of output copies for read of one page.

7. The apparatus according to claim 6, characterized in that when the number of copies set by said output copy setting means is one, said designation means designates the color

read mode, and said first output means is to output the read image, said selection means selects non-color transformation for said color transformation means, and non-compression for said compression means.

8. The apparatus according to claim 6, characterized in that when the number of copies set by said output copy setting means is a plurality of copies, said designation means designates the color read mode, and said first output means is to output the read image, said selection means selects a YCbCr space for said color transformation means, and JPEG for said compression means.

9. The apparatus according to claim 6, characterized in that when the number of copies set by said output copy setting means is one, said designation means designates the gray scale read mode, and said first output means is to output the read image, said selection means selects non-color transformation for said color transformation means, and non-compression for said compression means.

10. The apparatus according to claim 6, characterized in that when the number of copies set by said output copy setting means is a plurality of copies, said designation means designates the gray scale read mode, and said first output means is to output the read image, said selection means selects a YCbCr space for said color transformation means, and JPEG for said compression means.

11. The apparatus according to claim 6, characterized in

that when the number of copies set by said output copy setting means is one, said designation means designates the monochrome mode, and said first output means is to output the read image, said selection means selects non-color transformation for said color transformation means, and non-compression for said compression means.

12. The apparatus according to claim 6, characterized in that when the number of copies set by said output copy setting means is a plurality of copies, said designation means designates the monochrome mode, and said first output means is to output the read image, said selection means selects non-color transformation for said color transformation means, and run length compression for said compression means.

13. The apparatus according to claim 2, characterized by further comprising compression format designation means for designating the compression format of said compression means.

14. The apparatus according to claim 13, characterized in that when said designation means designates either one of the color read mode and the gray scale read mode, said third output means is to output the read image, and said compression format designation means designates JPEG, said selection means selects a YCbCr space for the color space to be transformed by said color transformation means.

15. The apparatus according to claim 13, characterized in that when said designation means designates either one of

~~the color read mode and the gray scale read mode, said~~ third output means is to output the read image, and said compression format designation means designates run length compression, said selection means selects non-transformation for said color transformation means.

16. The apparatus according to claim 13, characterized in that when said designation means designates the monochrome mode, and said third output means is to output the read image, said selection means selects run length compression as the compression format of said compression means, and does not select a color space to be transformed by said color transformation means.

17. A control method for an image processing apparatus having read means for reading an original image as a color image, first output means for printing the image on a printing medium and outputting the image, second output means for transmitting the image to a communication partner terminal via a facsimile, and third output means for outputting the read image data to a connected information processing apparatus, characterized by comprising:

the designation step of designating a read mode of the read means;

the color transformation step of transforming a color space of the image data read by the read means into one of a plurality of color spaces;

the compression step of compressing the image data in

one of a plurality of compression formats; and

the selection step of selecting a color space to be transformed in the color transformation step and a compression format in the compression step in accordance with the read mode designated in the designation step and one of the first to third means which is to output the read image.

18. A storage medium which stores program codes for causing a computer having read means for reading an original image as a color image, first output means for printing the image on a printing medium and outputting the image, second output means for transmitting the image to a communication partner terminal via a facsimile, and third output means for outputting the read image data to a connected information processing apparatus, to function as an apparatus for executing read and outputting image data read by said read means from any one of the first to third output means, characterized in that the program codes function as:

designation means for designating a read mode of said read means;

color transformation means for transforming a color space of the image data read by said read means into one of a plurality of color spaces;

compression means for compressing the image data in one of a plurality of compression formats; and

selection means for selecting a color space to be transformed by said color transformation means and a

compression format of said compression means in accordance with the read mode designated by said designation means and one of said first to third means which is to output the read image.

19. An image processing apparatus characterized by comprising:

input means for inputting color image data;

transformation means for transforming a color space of the color image data input by said input means;

compression means for compressing the color image data transformed by said transformation means by a predetermined algorithm; and

output means for outputting the color image data compressed by said compression means,

wherein said transformation means transforms the color image data input by said input means into color image data of a color space corresponding to an output destination of said output means.

20. The apparatus according to claim 19, characterized in that when the output destination of said output means is a communication line, said transformation means transforms the color space into an Lab color space.

21. The apparatus according to claim 19, characterized in that when the output destination of said output means is not a communication line, said transformation means transforms the color space into a color space which can be transformed

more easily than an Lab space.

22. An image processing method characterized by comprising:

the input step of inputting color image data;

the transformation step of transforming a color space of the color image data input in the input step;

the compression step of compressing the color image data transformed in the transformation step by a predetermined algorithm; and

the output step of outputting the color image data compressed in the compression step,

wherein the transformation step includes transforming the color image data input in the input step into color image data of a color space corresponding to an output destination in the output step.

23. A storage medium which stores program codes to be loaded and executed by a computer, characterized in that said storage medium stores program codes of:

the input step of inputting color image data;

the transformation step of transforming a color space of the color image data input in the input step;

the compression step of compressing the color image data transformed in the transformation step by a predetermined algorithm; and

the output step of outputting the color image data compressed in the compression step,

wherein the program code of the transformation step is a program code of transforming the color image data input in the input step into color image data of a color space corresponding to an output destination in the output step.